

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: 206/OH-58 SADDLE, INBOARD, RIGHT SIDE
Job Number	: 36144		
Estimate Number	: 10937		
P.O. Number	:	Part Number	: D29392
This Issue	: 12/5/2007      S.O. No. :	Drawing Number	: D2939 REV C
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: 1 / 1      Type : MACHINED PARTS	Drawing Revision	: C
Previous Run	: 34633	Material	:
Written By	: _____	Due Date	: 12/20/2007      Qty:      8      Um:      Each
Checked & Approved By	: _____		
Comment	: Est: B      00.06.26      New DWG rev (mpp 2069)      EC		
	: Est Rev:C As per Rev C 07-03-19 JLM		

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	D6101001	7075-T7351 2X6X6.25
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**Comment:** Qty.: 1.0000 Each(s)/Unit      Total : 8.0000 Each(s)

Issue material from stock: 7075-T7351 (QQ-A-250/12)

Cut Size 2.0" x 6.25" X 6.00"      Grain Along 6.00" Length

Batch No:

34872 25P 08/03/30

2.0 HAAS1 HAAS CNC VERTICAL MACHINING #1



**Comment:** HAAS CNC VERTICAL MACHINING #1

Program part-number and batch number.

1-Inspect part number and batch number are programmed correctly.

2-Machine Step No 1 of Folio and visually inspect as per dwg D2939 & attached Dimension Sheet

3-Machine Step No 2 of Folio and visually inspect as per dwg D2939 & attached Dimension Sheet

4-Machine Step No 3 of Folio and visually inspect as per dwg D2939 & attached Dimension Sheet

## 5-Deburr

LF 08/04/02

DTP 08/03/31

3.0	MILLING CONV.	CONVENTIONAL MILLING MACHINE
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**Comment:** CONVENTIONAL MILLING MACHINE

Machine Keyway and inspect per attached dimension sheet

DJP 08/04/03

4.0 QC1 INSPECT ALL DIM TO DIM SHEET



Comment: INSPECT ALL DIM TO DIM SHEET

DJP 08/05/03

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D2939-2 PAR #: N/A Fault Category: Prod / Machined parts NGR: Yes No DQA: 10 Date: 08/04/10  
 QA: N/C Closed: 10 Date: 08/04/10

NCR: <u>36144</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
08/03/31	# 2.0	one saddle has melting problem. → Part is a B. the 0.165" → 0.020" to thick → the saddle is skid date	UP 08.03.31 per Q51042	Scrap saddle Debur and Rehone Qtr @ B to 34872	DSP 08/03/31	08/03/31	UP 08.03.31 per Q51042	08/03/31
		Note are all in one direction by 0.070" (0.035 off center) RC incorrect organ was taken for both first len.						
08/04/03	# 2.0	Part Part lifted in vise causing all critical dim to be off by 0.165"	UP 08/04/04	Fix saws and detail groove to give relief Re take all tools and organ in first opp.	DSP 08/04/03	08/04/03	UP 08/04/04	08/04/03

NOTE: Date & initial all entries

Date:  
User:

Wednesday, 12/5/2007 10:36:16 AM

Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206/OH-58 SADDLE, INBOARD, RIGHT SIDE

Job Number: 36144

Part Number: D29392

Job Number:



Seq. #:

Machine Or Operation:

Description:

5.0

QC8

SECOND CHECK



Comment: SECOND CHECK

SA 08/04/06

6.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Acid etch and Alodine as per QSI 005 4.1

FL 08/04/07 (9)

7.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

M 107550

BL 08-04-07

(9)

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

M-h

08/04/07 (9X)

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: 430

8/4/07

SCP (9X)

10.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08/04/07

Job Completion



MF

08-04-08

W

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D2939-2 PAR #: N/A Fault Category: Prod / Machine NCR: Yes No DQA: D Date: 08/04/10  
D206-642 QA: N/C Closed: D Date: 08/04/10

NCR: 36144		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
08.04.03	2	Dimension "D", thickness of lip around Flange. is 0.206" on QTY(1) part	UP 08.04.03 p Q51042	PART IS ACCEPTABLE. SR-D206-642 Rev. B neglects this thickness for inertia values. Margin of Safety unaffected.	DJP 08/04/03	08/04/07	UP 08.04.03 p Q51042	08/04/07

NOTE: Date & initial all entries

<b>DART AEROSPACE LTD</b>		<b>Work Order:</b>	36144
<b>Description:</b> 206 Saddle, Inboard, Right side		<b>Part Number:</b>	D2939-2
<b>Inspection Dwg:</b> D2939 <b>Rev:</b> C <b>DSK:</b> <b>Rev:</b>		<b>Page 1 of 1</b>	

### FIRST ARTICLE INSPECTION DIMENSION SHEET

☒

First Article

☐

Prototype

Dim	Min	Max	Go/No Go Gauge	Record Actual Dimensions				
				1	2	3	4	5
A	0.100	0.140		0.130	.117	.134	.134	.135
B	0.100	0.140		0.163	.117	.134	.140	.135
C	0.100	0.140		0.125	.128	.123	.123	.125
D	0.210	0.230		0.220	0.220	.228	.225	.225
E	1.245	1.255		1.248	1.250	1.247	1.246	1.250
F	1.245	1.255		1.248	1.250	1.248	1.247	1.249
G	2.495	2.505		2.500	2.500	2.500	2.500	2.500
H	0.510	0.515			.510	.510	.510	.510
I	1.572	1.582		1.576	1.577	1.577	1.577	1.577
J	2.495	2.505		2.499	2.499	2.500	2.500	2.500
K	0.257	0.262		0.259	.258	.258	.258	.258
L	0.312	0.317		0.3155	.316	.316	.316	.316
M	0.235	0.240			.236	.236	.240	.240
N	0.100	0.140		0.119	0.120	.128	.126	.127
O	0.540	0.560		0.549	.545	.546	.553	.553
P	0.490	0.510		0.491	.503	.501	.502	.502
Q	3.715	3.725		3.717	3.718	3.719	3.718	3.714
R	2.720	2.760		2.740	2.740	2.742	2.741	2.741
S	0.240	0.270		0.25	.252	.258	.260	.260
T	0.100	0.180		0.135	.140	.140	.145	.145
U	1.625	1.635		1.628	1.628	1.625	1.625	1.625
V	1.362	1.372		1.3665	1.367	1.367	1.367	1.367
W	0.316	0.321		0.321	0.321	.321	.321	.321
X	1.250	1.270		1.2605	1.260	1.262	1.260	1.260
Y	1.565	1.585		1.577	1.577	1.578	1.577	1.577
Z	0.178	0.198		0.1875	0.1875	0.1875	0.1875	0.1875
AA								
AB								
AC								
AD								

Accept/Reject

Measured by:

DJP / S.F.

Date:

08/03/30 / 08/04/02

Audited by:

SD 08/04/06

Date:

Prototype Approval:

N/A

Date:

N/A

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.12.12	Re-format; Added Dim. X-Y, DT8683, DT8686, DT8690 & DT8695 A/B	KJ/RF	
C	07.03.21	Revised per drawing revision C	KJ/JLM	
D	07.11.23	DT8695 A/B removed	KJ/EC/DD	

<b>DART AEROSPACE LTD</b>		<b>Work Order:</b>	36144
<b>Description:</b> 206 Saddle, Inboard, Right side		<b>Part Number:</b>	D2939-2
<b>Inspection Dwg:</b> D2939 <b>Rev:</b> C <b>DSK:</b> <b>Rev:</b>		Page 1 of 1	

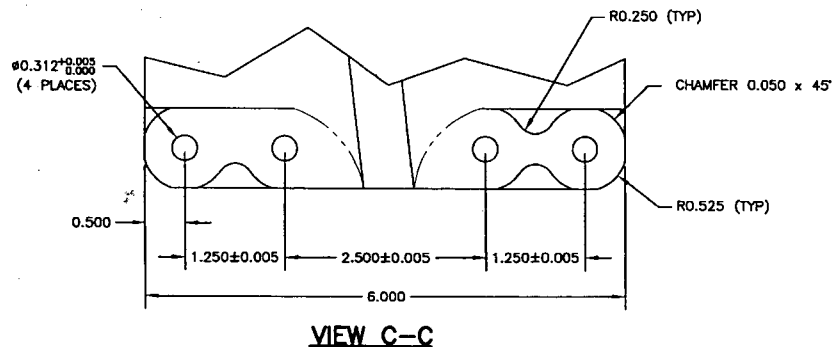
### FIRST ARTICLE INSPECTION DIMENSION SHEET

☒ First Article ☐ Prototype

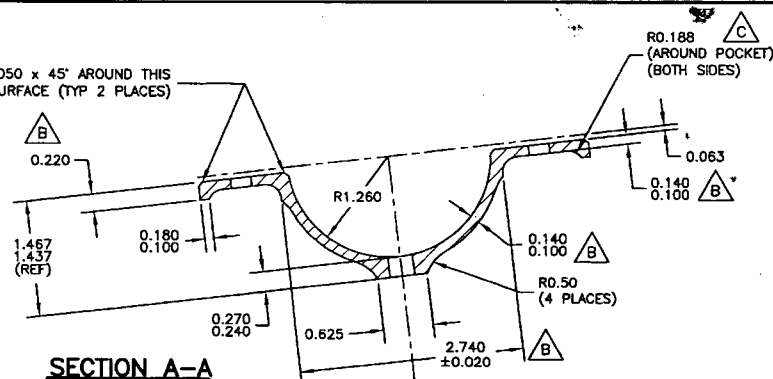
Dim	Min	Max	Go/No Go Gauge	Record Actual Dimensions				
				1	2	3	4	5
A	0.100	0.140		.133	.132	.133	.133	0.125
B	0.100	0.140		.133	.131	.131	0.130	0.125
C	0.100	0.140		0.120	0.118	0.118	0.119	0.117
D	0.210	0.230		.225	.223	.220	.221	0.206
E	1.245	1.255		1.249	1.249	1.249	1.248	1.247
F	1.245	1.255		1.248	1.249	1.249	1.248	1.248
G	2.495	2.505		2.501	2.501	2.501	2.4985	2.501
H	0.510	0.515		0.510	0.510	0.510	0.510	0.510
I	1.572	1.582		1.577	1.577	1.577	1.577	1.577
J	2.495	2.505		2.500	2.500	2.500	2.500	2.500
K	0.257	0.262		.258	.258	.258	.258	0.259
L	0.312	0.317		0.316	0.316	0.316	0.316	0.316
M	0.235	0.240		0.237	0.237	0.237	0.237	0.237
N	0.100	0.140		.126	.125	.127	.126	0.126
O	0.540	0.560		.553	.553	0.552	0.553	0.552
P	0.490	0.510		0.496	0.497	0.500	0.500	0.500
Q	3.715	3.725		3.714	3.714	3.714	3.714	3.717
R	2.720	2.760		2.740	2.740	2.743	2.741	2.740
S	0.240	0.270		.256	.251	.252	0.250	0.2455
T	0.100	0.180		.138	.143	0.140	0.140	0.143
U	1.625	1.635		1.625	1.625	1.625	1.625	1.625
V	1.362	1.372		1.370	1.370	1.370	1.370	1.370
W	0.316	0.321		.321	.321	.321	.321	.321
X	1.250	1.270		1.261	1.261	1.260	1.261	1.257
Y	1.565	1.585		1.571	1.571	1.570	1.571	1.567
Z	0.178	0.198		.188	.188	.188	.188	.188
AA								
AB								
AC								
AD								
Accept/Reject								

<b>Measured by:</b> S.F. / DTP 08/04/03	<b>Date:</b> 08/04/02
<b>Audited by:</b> SA 08/04/06	<b>Date:</b>
<b>Prototype Approval:</b> N/A	<b>Date:</b> N/A

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.12.12	Re-format; Added Dim. X-Y, DT8683, DT8686, DT8690 & DT8695 A/B	KJ/RF	
C	07.03.21	Revised per drawing revision C	KJ/JLM	
D	07.11.23	DT8695 A/B removed	KJ/EC/DD	



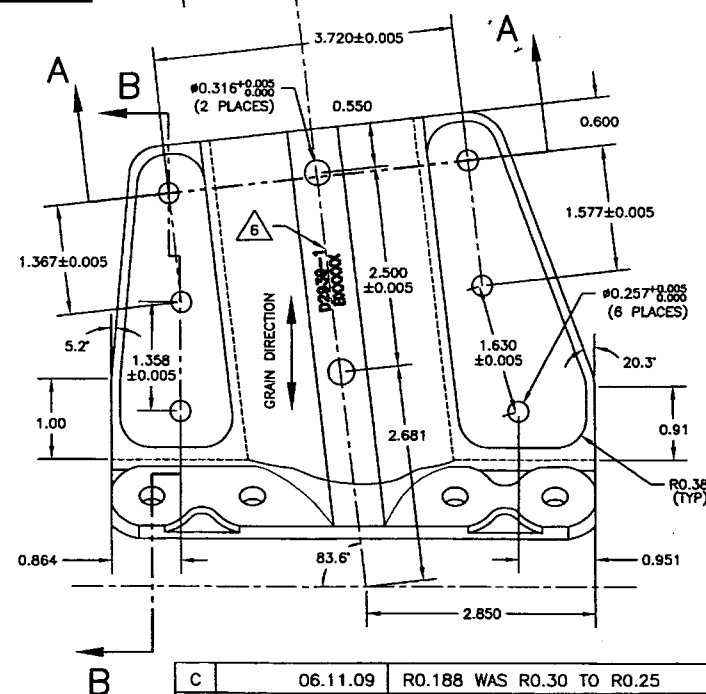
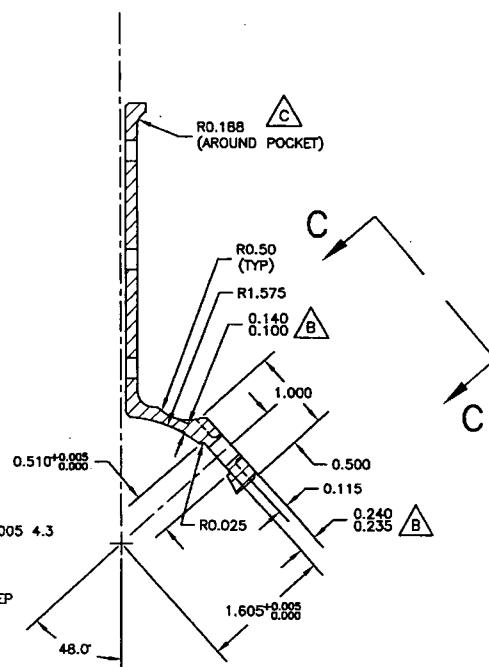
CHAMFER 0.050 x 45° AROUND THIS SURFACE (TYP 2 PLACES)



**D2939-1 LH SADDLE (SHOWN)**  
**D2939-2 RH SADDLE (OPPOSITE)**

**NOTES:**

- 1) MATERIAL: ALUMINUM 7075-T7351 (QQ-A-250/12)  
 (MAKE FROM D6101-001 SADDLE BILLET, 7075)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
 POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3
- 3) BREAK ALL SHARP EDGES 0.010 TO 0.020
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE INCHES
- 6) ENGRAVE PART AND BATCH NUMBER IN THIS AREA 0.010 TO 0.015 DEEP



C	06.11.09	R0.188 WAS R0.30 TO R0.25
B	00.05.29	CHANGED GEOMETRY AND MATERIAL
A	99.11.12	NEW ISSUE
DESIGN	4	DRAWN BY CB
CHECKED	PH	APPROVED
DATE	06.11.09	TITLE SADDLE INSIDE
DRAWING NO. D2939		REV. C SHEET 1 OF 1
DART DART AEROSPACE USA, INC. BELLEVUE, WA		SCALE 2:3

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 NO. 36144

01.02.12

